

## INTERNATIONAL SEARCH REPORT

International application No..

PCT/JP2004/018113

A. CLASSIFICATION OF SUBJECT MATTER  
Int.Cl<sup>7</sup> F16C19/36, F16C33/46

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int.Cl<sup>7</sup> F16C19/00-19/56, F16C33/30-33/66Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2005  
Kokai Jitsuyo Shinan Koho 1971-2005 Jitsuyo Shinan Toroku Koho 1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 11-210765 A (NTN Corp.), 03 August, 1999 (03.08.99), Claim 1; Par. Nos. [0007], [0012] to [0013]; Fig. 1 & US 6086261 A & DE 19900858 A1	1-3
Y	JP 2000-240661 A (NTN Corp.), 05 September, 2000 (05.09.00), Claim 2; Par. Nos. [0011] to [0014] (Family: none)	1-3
Y	JP 2003-28165 A (NSK Ltd.), 29 January, 2003 (29.01.03), Par. No. [0008]; Fig. 9 (Family: none)	2

 Further documents are listed in the continuation of Box C. See patent family annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "P" document published prior to the international filing date but later than the priority date claimed

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"&" document member of the same patent family

Date of the actual completion of the international search  
29 March, 2005 (29.03.05)Date of mailing of the international search report  
12 April, 2005 (12.04.05)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 64-79419 A (NSK Ltd.), 24 March, 1989 (24.03.89), Claim 6; page 2, upper left column, line 2 to page 3, upper left column, line 3; Fig. 4 & WO 1988/009881 A1 & US 5590225 A & GB 2217395 A & DE 3890466 T & KR 9701608 B	3
A	JP 2002-195255 A (NSK Ltd.), 10 July, 2002 (10.07.02), Claim 1; Par. Nos. [0015] to [0016]; Fig. 1 (Family: none)	1-3
A	JP 2003-166543 A (NSK Ltd.), 13 June, 2003 (13.06.03), Claim 1; Par. Nos. [0010] to [0018]; Figs. 1 to 2 (Family: none)	2